Claims:

1. An electrical machine with a single-pole winding substantially structured from two bodies, whereby at least one of said bodies is structured in the form of a laminated sheet plate and at least one of the bodies is assembled in a segmented form substantially from at least two carrier segments (2, 3, 22), and whereby each of said carrier segments (2, 3, 22, 33, 34) is by itself structured in a laminated way as well for receiving in an operationally safe manner at least two winding carriers (4) in suitable cavities (6), said winding carriers each being wound separately, characterized in that the winding carriers (4) are secured in a detachable manner; that the cross section of each cavity (6) of a receiving body assembled from the carrier segments (2, 3, 22, 32, 34) of a rotational electrical machine is at least approximately equal to the cross section of each cavity (6) of the receiving body of a linear electrical machine; and that the winding carriers (4) are in this way equally usable for both types of machine.

2. The electrical machine according to claim 1, characterized in that the cavity (6) for the winding carrier (4) is limited by a yoke as well as by two adjacent non-wound poles of the respective carrier segment (2, 3, 22, 33, 34).

3. The electrical machine according to claim 1 ~~or 2,~~ characterized in that sheet layers used for building up the winding carriers (4) and/or the carrier segments (2, 3, 22, 33, 34) are pre-configured in the form of laminated sheet plates, and that the electrical machine is at least partly assembled from said laminated plates in the form of a module construction.

4. The electrical machine according to ~~any one of the preceding~~ claims, characterized in that the winding carriers (4) are completely wound, preferably wound by a machine before they are mounted.

5. The electrical machine according to claim 4, characterized in that the winding carriers (4) each are designed in the form of profiled bodies with a coil head (11) and a pole shank (7).

6. The electrical machine according to claim 4 ~~or 5,~~ characterized in that the winding carriers (4) each are operationally rigidly but detachably connected with the respective receiving body (2, 3, 22) preferably by means by plug pins (10).

7. The electrical machine according to ~~any one of~~ claims 4 ~~to 6,~~ characterized in that the profile of the winding carrier (4) is limited on each longitudinal side by

an equally legged trapezoidal element, with an at least approximately rectangular center component being disposed between said trapezoidal components, said center component forming the pole shank (7).

8. The electrical machine according to claim 7, characterized in that the cavities (6) have a profile suitable for receiving in a form-locked manner the trapezoidal element (33), the latter pointing at the yoke of the receiving body in the operating condition, as well as for receiving the pole shank (7), whereby in the operating condition, the trapezoidal element (31) facing away from the yoke, said trapezoidal element forming the coil head (11), and the surfaces of the adjacent non-wound poles of the receiving body jointly form an at least approximately closed surface pointing at the air gap of the electrical machine.

9. The electrical machine according to ~~any one of the preceding~~ claims 4 ~~to 8~~, characterized in that the surface of the winding carrier (4) pointing at the yoke of the receiving body is in each case provided with a projection which, in the operating condition, is in engagement with a corresponding guide groove located in the zone of the yoke of the receiving body.

10. The electrical machine according to ~~any one of the preceding~~ claims 4 ~~to 9~~, characterized in that a plurality

of distinguishable windings are arranged at least on a part of the winding carrier (4).

11. The electrical machine according to ~~any one of the preceding~~ claims 4 ~~to 10~~, characterized in that the winding carriers (4) are provided with a flat wire winding.

12. The electrical machine according to ~~any one of the preceding~~ claims 1, characterized in that the carrier segments (2, 3, 22, 33, 34) structured from laminated sheet plates are designed in such a way that the individual layers are arranged offset, leaving clear the cavities (6) provided for receiving the winding carriers (4), in a way such that viewed across the circumference or the length of the electrical machine, each individual layer of each carrier segment (2, 3, 22, 33, 34) is in turn structured in a segmented manner; and that the segments of the one layer are arranged offset vis-à-vis the adjacent layer, and so offset preferably by one pole pitch.

13. The electrical machine according to claim 12, characterized in that the number of sheet layers used in each case for building up the receiving bodies (2, 3, 22, 33, 34) is freely selectable depending on the machine output required in given case.

14. The electrical machine according to claim 12 ~~or 13~~, characterized in that the carrier segments (2, 3, 22, 33, 34) each are build up from layers of transformer sheets punched out in the form of teeth, preferably from grain-oriented sheet material.

15. The electrical machine according to ~~any one of~~ claims 12 ~~to 14~~, characterized in that the carrier segments (22) are provided both on the side facing the interior of the machine and on the side facing the exterior of the machine with cavities (6) distributed over the periphery for receiving winding carriers (6) for building up a compensated electrical machine.

16. The use of the electrical machine structured in a segmented manner according to claims 1 ~~to 15~~, as a linear motor within a closed handling axle.

17. The use of the electrical machine structured in a segmented manner according to claims 1 ~~to 16~~, as a motor with an interior or exterior rotor, linear motor, synchronous or asynchronous machine, direct drive, permanently excited machine, or as an electronically commutated machine.